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From the  
INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

To:  
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PATENT COOPERATION TREATY

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60596 W  
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WRITTEN OPINION

(PCT Rule 66)

Date of Mailing  
(day/month/year)

28 MAY 2004

Applicant's or agent's file reference

14175-006WO1

REPLY DUE

within 2 months/days from  
the above date of mailing

International application No.

PCT/US03/27568

International filing date (day/month/year)

03 September 2003 (03.09.2003)

Priority date (day/month/year)

05 September 2002 (05.09.2002)

International Patent Classification (IPC) or both national classification and IPC

IPC(7): C08G 63/02, 63/08; C08F 118/14 and US Cl.: 525/221, 231; 524/7

Applicant

VOCFREE.INC.

1. This written opinion is the first (first, etc.) drawn by this International Preliminary Examining Authority.
2. This opinion contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2 (a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

3. The applicant is hereby invited to reply to this opinion.

**When?** See the time limit indicated above. ~~The applicant may, before the expiration of that time limit, request this Authority to grant an extension. See rule 66.2(d).~~

**How?** By submitting a written reply, accompanied, where appropriate, by amendments, according to Rule 66.3. For the form and the language of the amendments, see Rules 66.8 and 66.9.

**Also** For an additional opportunity to submit amendments, see Rule 66.4.  
For the examiner's obligation to consider amendments and/or arguments, see Rule 66.4 bis.  
For an informal communication with the examiner, see Rule 66.6

If no reply is filed, the international preliminary examination report will be established on the basis of this opinion.

4. The final date by which the international preliminary examination report must be established according to Rule 69.2 is: 05 January 2005 (05.01.2005)

Name and mailing address of the IPEA/US  
Mail Stop PCT, Attn: IPEA/US  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, Virginia 22313-1450

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David Wu

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Jean Proctor  
Paralegal Specialist

**I. Basis of the opinion**

1. With regard to the elements of the international application:\*

- ☒ the international application as originally filed
- ☒ the description:  
pages 1-20, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_
- ☒ the claims:  
pages 21-26, as originally filed  
pages NONE, as amended (together with any statement) under Article 19  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_
- ☐ the drawings:  
pages NONE, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_
- ☐ the sequence listing part of the description:  
pages NONE, as originally filed  
pages NONE, filed with the demand  
pages NONE, filed with the letter of \_\_\_\_\_

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.  
These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

- ☐ the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the written opinion was drawn on the basis of the sequence listing:

- ☐ contained in the international application in printed form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages NONE
- ☐ the claims, Nos. NONE
- ☐ the drawings, sheets/fig NONE

5. ☐ This opinion has been drawn as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this opinion as "originally filed."

**WRITTEN OPINION**

International Application No.  
PCT/US03/27568

**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. STATEMENT**

Novelty (N)	Claims <u>1-29</u>	YES
	Claims <u>NONE</u>	NO
Inventive Step (IS)	Claims <u>1-29</u>	YES
	Claims <u>NONE</u>	NO
Industrial Applicability (IA)	Claims <u>1-29</u>	YES
	Claims <u>NONE</u>	NO

**2. CITATIONS AND EXPLANATIONS**

Claims 1-29 meet the Novelty, Inventive step, and Industrial Applicability criteria under PCT Article 33(2)-33(4). The prior art to Kida et al. (US 6,383,982 B1) discloses color developer composition comprising (A) a color developer containing a polyvalent metal salt of a salicylic acid derivative, and (B) a polyester polyol having in the molecule skeleton at least one carbonate bond or ester bond, and a derivative thereof, an aqueous dispersion and a color developing ink using this color developer composition, and a recording sheet having a layer containing this color developer composition on a base material. The prior art to Revol (US 5,965,633) discloses a lithographic printing ink which contains a lithographic varnish containing an alkali soluble or dispersible binder material which is the reaction product of an acid functional hard resin with a fatty ester oil and/or an alkyd resin. The disclosure of Reiter et al. (US 5,524,677) is in regard to rapid thermosetting, low VOC web offset lithographic inks that are prepared from solid resin, drying oil alkyds, bodied drying oil, vegetable oil, fatty acids, multifunctional unsaturated polyester, reducing agents and transition metal salts of organic acids. The aqueous lithographic fountain solution contains hydroperoxides or peroxides which promote free radical polymerization of the ink in contact therewith. The metal salts of organic acids function as crosslinking agents in combination with excess carboxylic acid functionality of the ink. Optionally, the reducing agent and the organic hydroperoxide or peroxide may be interchanged. Sugarman et al. (WO99/32563 and US 5,173,113) disclose vinyl copolymer latexes useful in inks and lithographic ink formulations with unsaturated fatty acid esters with multifunctional esters, respectively. Thus, the prior art does not anticipate the composition claimed in the instant invention or suggest the same. Furthermore, the claimed compositions may be made and used in industry.

**WRITTEN OPINION**

International Application No.  
PCT/US03/27568

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

**TIME LIMIT:**

The time limit set for response to a Written Opinion may not be extended. 37 CFR 1.484(d). Any response received after the expiration of the time limit set in the Written Opinion will not be considered in preparing the International Preliminary Examination Report.